

NOVEL FUNCTIONAL NORBORNENES AS INITIATORS FOR RADICAL POLYMERIZATION, THEIR POLYMERIC DERIVATIVES AND A PROCESS FOR PRODUCING THE SAME

【 Abstract 】

The present invention relates to novel functional norbornenes as initiators for radical polymerization, its polymer and a process for producing the same. More particularly, the novel functional norbornenes can be selectively polymerized by ring-opening metathesis polymerization or radical polymerization to obtain various polynorbornene derivatives or grafted copolymer materials. The polynorbornene derivatives and grafted copolymer materials not only exhibit excellent functional properties but also enhanced physical and chemical properties after modification. The polynorbornene derivatives and grafted copolymer materials disclosed in the present invention exhibit excellent heat resistance, transparency and water resistance. The present invention also deals with a process for producing such derivatives and materials having controllable molecular weight with narrow molecular weight distribution.